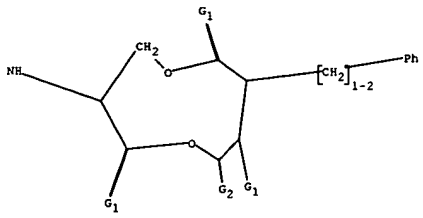
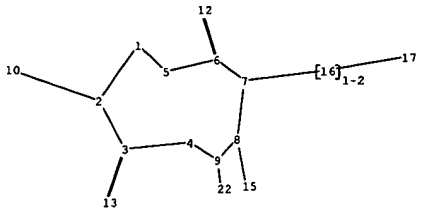
```
=> d his

     (FILE 'HOME' ENTERED AT 11:46:22 ON 09 NOV 2001)

     FILE 'REGISTRY' ENTERED AT 11:46:25 ON 09 NOV 2001
L1                STRUCTURE UPLOADED
L2             14 S L1
L3            231 S L1 FULL

     FILE 'HCAPLUS' ENTERED AT 11:47:11 ON 09 NOV 2001
L4             17 S L3
L5             10 S L4 AND PD < MARCH 1998
L6              1 S L5 AND SAKANAKA, O?/AU
L7              9 S L5 NOT L6
L8              0 S L7, IBIB ABS FHITSTR, 1-9

     FILE 'CAOLD' ENTERED AT 11:50:40 ON 09 NOV 2001

=> s l3

L9              0 L3
```

STN Structure : 9601655b.str





chain nodes :
10 12 13 15 16 17 22
ring nodes :
1 2 3 4 5 6 7 8 9
chain bonds :
2-10 3-13 6-12 7-16 8-15 9-22 16-17
ring bonds :
1-2 1-5 2-3 3-4 4-9 5-6 6-7 7-8 8-9
exact/norm bonds :
2-10 3-13 6-12 8-15 9-22
exact bonds :
1-2 1-5 2-3 3-4 4-9 5-6 6-7 7-8 7-16 8-9 16-17
isolated ring systems :
containing 1 :

G1:O,S

G2:CH3,Et

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS
12:CLASS 13:CLASS 15:CLASS 16:CLASS 17:Atom 22:CLASS

Connecting via Winsock to STN

Trying 3106016892...Open

Welcome to STN International! Enter x:x
LOGINID:ssspta1612BXR
PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2	Dec 17	The CA Lexicon available in the CAPLUS and CA files
NEWS 3	Feb 06	Engineering Information Encompass files have new names
NEWS 4	Feb 16	TOXLINE no longer being updated
NEWS 5	Apr 23	Search Derwent WPINDEX by chemical structure
NEWS 6	Apr 23	PRE-1967 REFERENCES NOW SEARCHABLE IN CAPLUS AND CA
NEWS 7	May 07	DGENE Reload
NEWS 8	Jun 20	Published patent applications (A1) are now in USPATFULL
NEWS 9	JUL 13	New SDI alert frequency now available in Derwent's DWPI and DPCI
NEWS 10	Aug 23	In-process records and more frequent updates now in MEDLINE
NEWS 11	Aug 23	PAGE IMAGES FOR 1947-1966 RECORDS IN CAPLUS AND CA
NEWS 12	Aug 23	Adis Newsletters (ADISNEWS) now available on STN
NEWS 13	Sep 17	IMSworld Pharmaceutical Company Directory name change to PHARMASEARCH
NEWS 14	Oct 09	Korean abstracts now included in Derwent World Patents Index
NEWS 15	Oct 09	Number of Derwent World Patents Index updates increased
NEWS 16	Oct 15	Calculated properties now in the REGISTRY/ZREGISTRY File
NEWS 17	Oct 22	Over 1 million reactions added to CASREACT
NEWS 18	Oct 22	DGENE GETSIM has been improved
NEWS 19	Oct 29	AAASD no longer available

NEWS EXPRESS	August 15 CURRENT WINDOWS VERSION IS V6.0c, CURRENT MACINTOSH VERSION IS V6.0 (ENG) AND V6.0J (JP), AND CURRENT DISCOVER FILE IS DATED 07 AUGUST 2001
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 11:46:22 ON 09 NOV 2001

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.15	0.15

FILE 'REGISTRY' ENTERED AT 11:46:25 ON 09 NOV 2001
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

STRUCTURE FILE UPDATES: 7 NOV 2001 HIGHEST RN 367906-46-5
DICTIONARY FILE UPDATES: 7 NOV 2001 HIGHEST RN 367906-46-5

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER see HELP CROSSOVER for details.

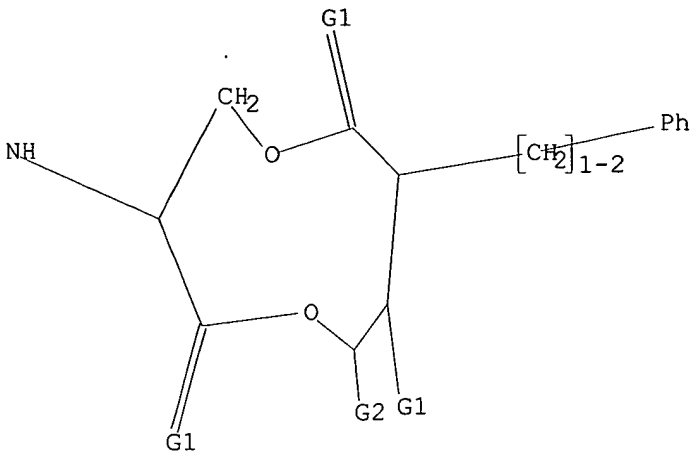
Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=>
Uploading 9601655b.str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS
L1 STR



G1 O,S

G2 Me,Et

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 11:46:55 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 15 TO ITERATE

100.0% PROCESSED 15 ITERATIONS 14 ANSWERS
SEARCH TIME: 00.00.02

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 68 TO 532
PROJECTED ANSWERS: 56 TO 504

L2 14 SEA SSS SAM L1

=> s l1 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 133.25 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y

FULL SEARCH INITIATED 11:47:06 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 241 TO ITERATE

100.0% PROCESSED 241 ITERATIONS 231 ANSWERS
SEARCH TIME: 00.00.02

L3 231 SEA SSS FUL L1

=> file hcaplus

COST IN U.S. DOLLARS SINCE FILE TOTAL

	ENTRY	SESSION
FULL ESTIMATED COST	133.56	133.71

FILE 'HCAPLUS' ENTERED AT 11:47:11 ON 09 NOV 2001

FILE COVERS 1947 - 9 Nov 2001 VOL 135 ISS 20
FILE LAST UPDATED: 7 Nov 2001 (20011107/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

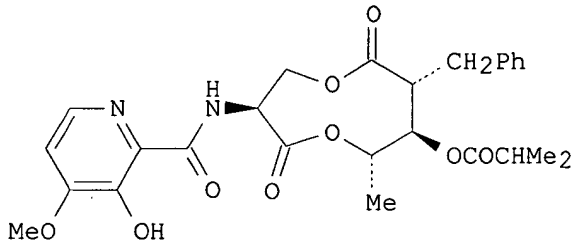
This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

HCAplus now provides online access to patents and literature covered in CA from 1947 to the present. On April 22, 2001, bibliographic information and abstracts were added for over 2.2 million references published in CA from 1947 to 1966.

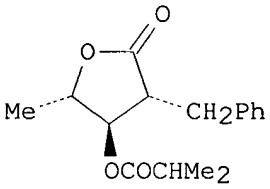
```
=> s l3

L4          17 L3

=> s l4 and pd < march 1998

      17342633 PD < MARCH 1998
                 (PD<19980300)
L5          10 L4 AND PD < MARCH 1998

=> s l5 and sakanaka, o?/au

            22 SAKANAKA, O?/AU
L6           1 L5 AND SAKANAKA, O?/AU

=> d l6, ibib abs fhitstr, 1
```

L6 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:19692 HCAPLUS
DOCUMENT NUMBER: 130:168617
TITLE: UK-2A, B, C and D, novel antifungal antibiotics from Streptomyces sp. 517-02 III. Absolute configuration of an antifungal antibiotic, UK-2A, and consideration of its conformation

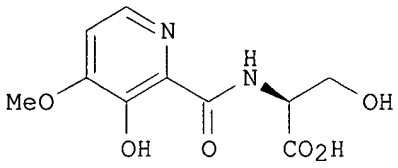
AUTHOR(S): Shibata, Kozo; Hanafi, Muhammad; Fujii, Jyunko; **Sakanaka, Osamu**; Iinuma, Katsuharu; Ueki, Masashi; Taniguchi, Makoto
CORPORATE SOURCE: Faculty of Science, Osaka City University, Osaka, 558-8585, Japan
SOURCE: J. Antibiot. (**1998**), 51(12), 1113-1116
CODEN: JANTAJ; ISSN: 0021-8820
PUBLISHER: Japan Antibiotics Research Association
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I



II



III

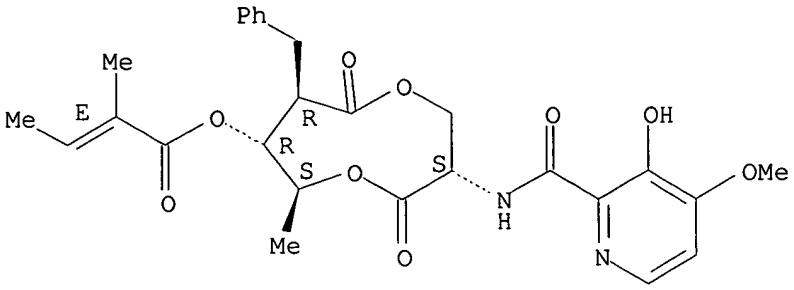
AB The abs. configuration of UK-2A (I) was detd. by the elucidation of the abs. configurations of butanolide II and the serine deriv. III, the products of alk. hydrolysis of I. The abs. configuration of UK-2A was found to be (+)-(2R,3R,4S,7S).

IT **167173-86-6**, UK 2B
RL: MSC (Miscellaneous)
(detn. of the abs. configuration of UK-2A, an antifungal antibiotic)

RN 167173-86-6 HCAPLUS

CN 2-Butenoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester, (2E)- (9CI) (CA INDEX NAME)

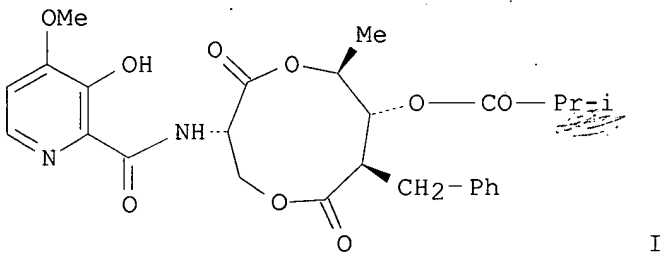
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



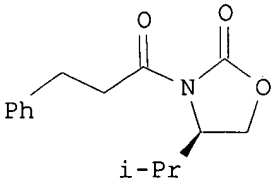
REFERENCE COUNT: 6
REFERENCE(S):
(1) Fuji, K; Synthesis 1975, P276 HCAPLUS
(2) Hanafi, M; J Antibiotics 1996, V49, P1226 HCAPLUS
(3) Trecourt, F; Tetrahedron 1993, V49, P8373 HCAPLUS
(4) Ueki, M; J Antibitics 1996, V49, P639 HCAPLUS
(5) Wasserman, H; Chem Rev 1986, V86, P845 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
=> d his

     (FILE 'HOME' ENTERED AT 11:46:22 ON 09 NOV 2001)

     FILE 'REGISTRY' ENTERED AT 11:46:25 ON 09 NOV 2001
L1              STRUCTURE UPLOADED
L2           14 S L1
L3          231 S L1 FULL

     FILE 'HCAPLUS' ENTERED AT 11:47:11 ON 09 NOV 2001
L4           17 S L3
L5           10 S L4 AND PD < MARCH 1998
L6            1 S L5 AND SAKANAKA, O?/AU

=> s l5 not l6

L7            9 L5 NOT L6

=> s l7, ibib abs fhitstr, 1-9

          1332 'L7'
            14 IBIB
        179901 ABS
             4 ABSES
        179905 ABS
                  (ABS OR ABSES)
             0 FHITSTR
       6636974 1
       1404846 9
L8           0 L7, IBIB ABS FHITSTR, 1-9
                  ('L7'(W)IBIB(W)ABS(W)FHITSTR(W)1(W)9)

=> d l7, ibib abs fhitstr, 1-9
```

L7 ANSWER 1 OF 9 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:313243 HCAPLUS
DOCUMENT NUMBER: 131:214101
TITLE: Total synthesis of the antifungal dilactone UK-2A and analogs and their bioactivities
AUTHOR(S): Kamei, Noriyuki; Shibata, Tetsuo; Inoguchi, Kiyoshi; Senda, Hisato; Ikari, Takashi; Itoh, Nobuko; Shimano, Masanao
CORPORATE SOURCE: Department of Medical Chemistry and Molecular Design, Drug Discovery Research Laboratories, Kaken Pharmaceutical Co., Ltd., Japan
SOURCE: Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (**1998**), 40th, 679-684
CODEN: TYKYDS
PUBLISHER: Nippon Kagakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
GI



I



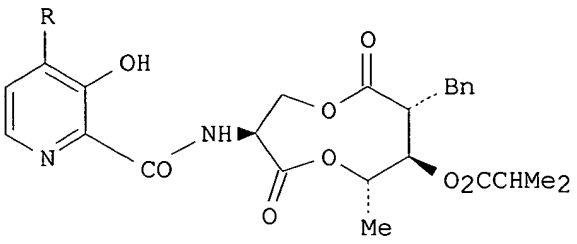
II

AB UK-2A (I) which has recently been isolated from the mycelial cake of Streptomyces sp. 517-02, possesses nine-membered dilactone and a picolinic acid moiety. The plane structure of UK-2A has been elucidated by 1H and 13C NMR analyses and chem. degrdn. studies, but the relative and abs. configurations of the four chiral centers in UK-2A still remain to be detd. UK-2A has strongly inhibited the growth of various kinds of yeasts and filamentous fungi, but its cytotoxic activities against several kinds of mammalian cells were very weak. The combination of its interesting mol. architecture and the potent antifungal activity prompted us to launch the total synthesis of UK-2A. The synthesis of UK-2A has been achieved

through a 12-step sequence from II in 26% overall yield. The key strategy employed in this approach involves; (1) construction of the three consecutive chiral centers from C2 to C4 based upon the well-established Evans aldol reaction and (2) the nine-membered lactonization. The authors' synthetic route to UK-2A would permit a practical and reliable construction of UK-2A and a variety of its analogs. In order to define the selective cytotoxicities of UK-2A against yeasts and filamentous fungi, UK-2A and its analogs synthesized were subjected to the MIC evaluation and cytotoxic activity examn. compared with the ref. compds., amphotericin B and fluconazole. UK-2A has a broad antifungal spectrum, while its cytotoxicities was considerably weak compared to other substrates. The results of the UK-2A analogs suggested that the basicity of the picolinic acid moiety in UK-2A was essential for the antifungal activities and that the feature of the nine-membered dilactone contributed to the selective cytotoxicities.

IT **167173-85-5P**, Antibiotic UK 2A
RL: BAC (Biological activity or effector, except adverse); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(total synthesis of antifungal dilactone UK-2A and analogs and bioactivities)
RN 167173-85-5

L7 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1998:651994 HCAPLUS
DOCUMENT NUMBER: 130:3703
TITLE: Total synthesis of the antifungal dilactones UK-2A and UK-3A: the determination of their relative and absolute configurations, analog synthesis and antifungal activities
AUTHOR(S): Shimano, Masanao; Kamei, Noriyuki; Shibata, Tetsuo; Inoguchi, Kiyoshi; Itoh, Nobuko; Ikari, Takashi; Senda, Hisato
CORPORATE SOURCE: Dep. Med. Chem. Mol. Design, Drug Discovery Res. Lab., Kaken Pharmaceutical Co., Ltd., Minami Kawara-cho, Yamashina-ku, Kyoto, 607-8042, Japan
SOURCE: Tetrahedron (**1998**), 54(42), 12745-12774
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 130:3703
GI



I

AB The synthesis of the antifungal dilactones (I), UK-2A (R = OMe) and UK-3A (R = H), is described. In addn. to providing a workable synthetic route to these potent antifungal antibiotics, this has allowed us to det. the assignment of the relative and abs. configurations in the nine-membered ring. Furthermore, UK-2A analogs were also synthesized and evaluated for their antifungal activities and cytotoxic activities along with UK-2A, (2R, 3R, 4S, 7R)-UK-2A, UK-3A, (2R, 3R, 4S, 7R)-UK-3A, and antimycin A. The structural requirements for the selective cytotoxicity against yeasts and filamentous fungi will also be suggested.

IT **167173-85-5P**, UK-2A
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(synthesis, antifungal activity, cytotoxicity and abs. configuration of
dilactones UK-2A and UK-3A)

RN 167173-85-5

REFERENCE COUNT: 36

REFERENCE(S):
(2) Barrow, C; J Antibiot 1997, V50, P729 HCAPLUS
(3) Brooks, B; J Comput Chem 1983, V4, P187 HCAPLUS
(4) Centeno, N; Chem Phys Lett 1995, V232, P374 HCAPLUS
(5) Dickie, J; J Med Chem 1963, V6, P424 HCAPLUS
(6) Evans, D; J Am Chem Soc 1981, V103, P2127 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1998:355895 HCAPLUS

DOCUMENT NUMBER: 129:122477

TITLE: Enantioselective total synthesis of the antifungal dilactone, UK-2A: the determination of the relative and absolute configurations

AUTHOR(S): Shimano, Masanao; Shibata, Tetsuo; Kamei, Noriyuki

CORPORATE SOURCE: Dep. Medicinal Chem. Molecular Design, Drug Discovery Res. Labs., Kaken Pharmaceutical Co., Kyoto, 607-8042, Japan

SOURCE: Tetrahedron Lett. (**1998**), 39(24), 4363-4366
CODEN: TELEAY; ISSN: 0040-4039

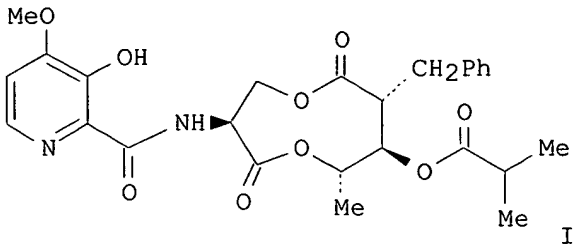
PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 129:122477

GI



I

AB The synthesis of the antifungal dilactone, UK-2A (I), is described. In addn. to providing a workable synthetic route to this potent antifungal antibiotic, this has allowed us to det. the assignment of the relative and abs. configurations in the nine-membered ring.

IT **167173-85-5P**, (+)-UK-2A
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(abs. configuration of UK-2A via enantioselective total synthesis)

RN 167173-85-5

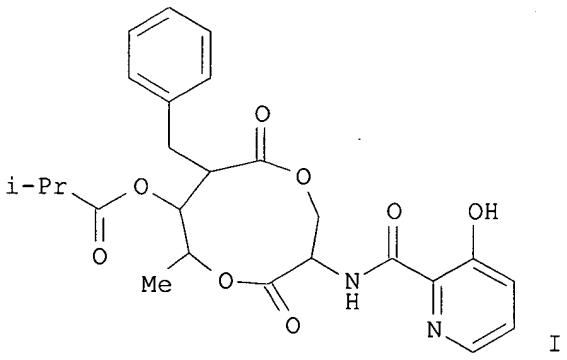
L7 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1998:22846 HCAPLUS
DOCUMENT NUMBER: 128:163891
TITLE: The mode of action of UK-2A and UK-3A, novel antifungal antibiotics from Streptomyces sp. 517-02
AUTHOR(S): Ueki, Masashi; Taniguchi, Makoto
CORPORATE SOURCE: Dep. Biology, Fac. Sci., Osaka City Univ., Osaka, 558, Japan
SOURCE: J. Antibiot. (**1997**), 50(12), 1052-1057
CODEN: JANTAJ; ISSN: 0021-8820
PUBLISHER: Japan Antibiotics Research Association
DOCUMENT TYPE: Journal
LANGUAGE: English

AB UK-2A and UK-3A are structural relatives of antimycins, which were isolated as antifungal antibiotics with little cytotoxicity that demonstrated inhibition of respiratory activity. They halve the cellular respiration of yeast within 4~5 min and the intracellular ATP content within 2~5 min. They inhibited the yeast mitochondrial respiration using .beta.-hydroxybutyrate and succinate as a respiratory substrate, but no inhibition was obsd. using ascorbate-reduced tetra-Me p-phenylenediamine as the substrate. The site of respiratory inhibition of UK-2A and UK-3A was thought to be the cytochrome bc1 complex in the mitochondrial electron transport chain of yeast cells. They also inhibited the mitochondrial respiration of rat liver. Intact animal cells might have some system to defend themselves from the actions of UK-2A and UK-3A.

IT **167173-85-5**, UK-2A
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(mechanism of antifungal action of UK-2A and UK-3A)

RN 167173-85-5

L7 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1997:504110 HCAPLUS
DOCUMENT NUMBER: 127:217524
TITLE: UK-3A, a novel antifungal antibiotic from Streptomyces sp. 517-02: fermentation, isolation, structural elucidation and biological properties
AUTHOR(S): Ueki, Masashi; Kusumoto, Atsushi; Hanafi, Muhammad; Shibata, Kozo; Tanaka, Toshio; Taniguchi, Makoto
CORPORATE SOURCE: Faculty of Science, Osaka City University, Osaka, 558, Japan
SOURCE: J. Antibiot. (**1997**), 50(7), 551-555
CODEN: JANTAJ; ISSN: 0021-8820
PUBLISHER: Japan Antibiotics Research Association
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



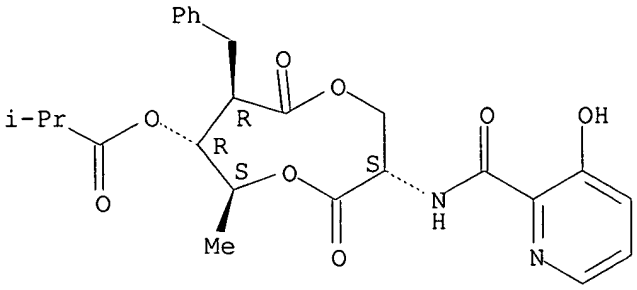
I

AB A novel antifungal antibiotic, UK-3A (I), was obtained from the mycelial cake of Streptomyces sp. 517-02. I was very similar in structure to UK-2A, a structural relative of antimycin A. The antifungal spectrum of I was relatively broad (MICs for yeasts and filamentous fungi: 1.56.apprx.6.25 and 0.39.apprx.1.56 .mu.g/mL, resp.). The cytotoxic activity of I was weak (IC50: 18.apprx.100 .mu.g/mL).

IT **194931-82-3P**, Antibiotic UK 3A
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BPN (Biosynthetic preparation); PRP (Properties); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(UK-3A is a novel antifungal antibiotic from Streptomyces)
RN 194931-82-3 HCAPLUS
CN Propanoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-

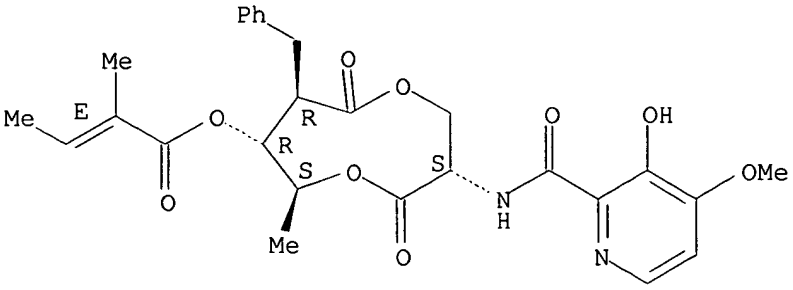
7-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

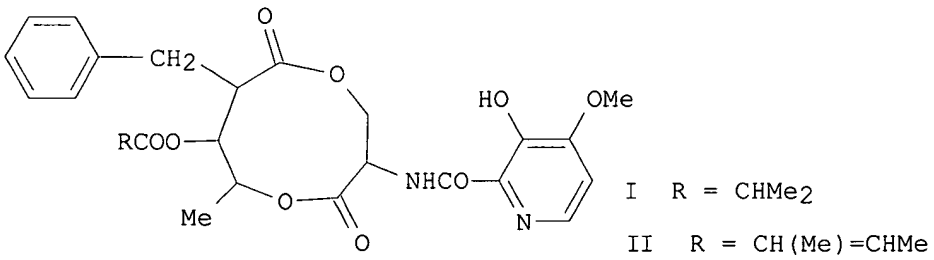


L7 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1997:16443 HCAPLUS
DOCUMENT NUMBER: 126:144017
TITLE: UK-2A, B, C and D, novel antifungal antibiotics from Streptomyces sp. 517-02. II. Structural elucidation
AUTHOR(S): Hanafi, Muhammad; Shibata, Kozo; Ueki, Masashi; Taniguchi, Makoto
CORPORATE SOURCE: Fac. Sci., Osaka City Univ., Osaka, 558, Japan
SOURCE: J. Antibiot. (**1996**), 49(12), 1226-1231
CODEN: JANTAJ; ISSN: 0021-8820
PUBLISHER: Japan Antibiotics Research Association
DOCUMENT TYPE: Journal
LANGUAGE: English
AB UK-2A, UK-2B, UK-2C and UK-2D, novel antibiotics produced by Streptomyces sp. 517-02, exhibit strong antifungal activity. The structures were elucidated based on spectral and chem. evidence that these compds. are the derivs. of the nine-membered dilactone formed from serine and 4-hydroxypentanoic acid moiety.
IT **167173-86-6P**
RL: PRP (Properties); PUR (Purification or recovery); PREP (Preparation)
(structural elucidation of UK-2A, UK-2B, UK-2C and UK-2D, novel antifungal antibiotics from Streptomyces sp. 517-02)
RN 167173-86-6 HCAPLUS
CN 2-Butenoic acid, 2-methyl-, (3S,6S,7R,8R)-3-[[(3-hydroxy-4-methoxy-2-pyridinyl)carbonyl]amino]-6-methyl-4,9-dioxo-8-(phenylmethyl)-1,5-dioxonan-7-yl ester, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



L7 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1996:463922 HCAPLUS
DOCUMENT NUMBER: 125:109869
TITLE: UK-2A, B, C and D, novel antifungal antibiotics from Streptomyces sp. 517-02. I. Fermentation, isolation, and biological properties
AUTHOR(S): Ueki, Masahi; Abe, Keiichi; Hanafi, Muhammad; Shibata, Kozo; Tanaka, Toshio; Taniguchi, Makoto
CORPORATE SOURCE: Fac. Science, Osaka City Univ., Osaka, 558, Japan
SOURCE: J. Antibiot. (**1996**), 49(7), 639-643
CODEN: JANTAJ; ISSN: 0021-8820
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I R = $CHMe_2$

II R = CH(Me)=CHMe

AB Novel antifungal antibiotics, UK-2A (I), UK-2B (II) and a mixt. of UK-2C and UK-2D, were obtained from the mycelial cake of Streptomyces sp. 517-02. All of the UK-2 compds. were similar in structure to antimycin A.

The antifungal activities of of UK-2 compds. were as strong as that of antimycin A. However, the UK-2 compds. demonstrated weak cytotoxicity compared to antimycin A.

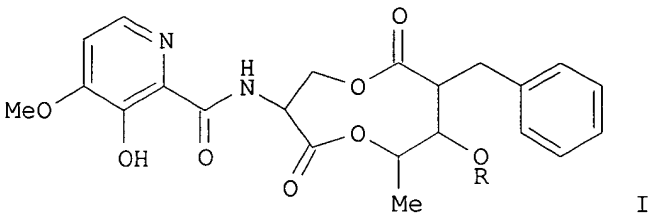
IT **167173-85-5**, UK 2A
RL: BAC (Biological activity or effector, except adverse); PRP (Properties); BIOL (Biological study)
(UK-2A, B, C and D, novel antifungal antibiotics from Streptomyces sp. 517-02. I. Fermn., isolation, and biol. properties)

RN 167173-85-5

L7 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1995:934118 HCAPLUS
DOCUMENT NUMBER: 123:337552
TITLE: Fungicides manufacture with Streptoverticillium
INVENTOR(S): Taniguchi, Makoto; Shibata, Kozo; Abe, Keiichi; Kodama, Tooru; Uotani, Kazumichi; Oonishi, Yoshitaka
PATENT ASSIGNEE(S): Suntory Ltd, Japan; Meiji Seika Co
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07233165	A2	19950905	JP 1994-26884	19940224 <--

OTHER SOURCE(S): MARPAT 123:337552
GI



I

AB Fungicides (I: R = linear or branched aliph. (un)satd. acyl group) are manufd. by culturing Streptoverticillium sp. SAM2084. Shake-culture of Streptoverticillium sp. SAM2084 for manuf. of four I wherein R = 2-methylpropanoyl (UK-2A), trans-2-methyl-2-butenoyl (UK-2B), 3-methylbutanoyl (UK-2C), and 2-methylbutanoyl (UK-2D) was shown. Also given were the physiol. and morphol. characteristics of the Streptoverticillium sp. SAM2084.
IT **167173-85-5P**, UK 2A
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(fungicides manuf. with Streptoverticillium)
RN 167173-85-5

L7 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1995:671786 HCAPLUS
DOCUMENT NUMBER: 123:164736
TITLE: The structures of UK-1 and UK-2, novel antibiotics from Streptomyces sp. 517-02
AUTHOR(S): Hanafi, O Muhammad; Kozo, Shibata; Masaru, Kashiwada; Masashi, Ueki; Makoto, Taniguchi
CORPORATE SOURCE: Faculty Science, Osaka City University, Japan
SOURCE: Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (**1994**), 36th, 728-35
CODEN: TYKYDS

DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB The mycelial cake was extd. with acetone, and filtered. The filtrate was concd. to give aq. soln., which was extd. with chloroform. Org. layer was concd. to yield an oily material, followed by purifn. on silica gel column chromatog. to give crude UK-1 and UK-2. Finally, the recrystn. of each fractions from MeOH, afforded UK-1 and UK-2. UK-1 (I), a novel metabolite, demonstrated potent cytotoxic activity against B16, Hela and P388 cells, and UK-2, novel complex of antibiotics, exhibited strong antifungal activity. Methylation of UK-1 by CH3I and anhyd. K2CO3 in dry acetone gave monomethyl ether deriv., Me-UK-1. Alk. hydrolysis of UK-1 afforded carboxylic acid deriv., DeMe-UK-1. Partial structures, A, B, and C were elucidated by COSY, and COLOC expts. Based on these results, the structure of UK-1 was deduced to be a novel benzoxazole dimer deriv. UK-2, novel metabolite contg. complex of antibiotics with strong antifungal activity, was purified by reverse phase HPLC, to give UK-2A, B, C and D. From NMR and mass spectral data, the structures of UK-2A, B, C and D were established as isobutyrate, tiglate, isovalerate, and 2-methylbutyrate of nine membered dilactone skeleton, resp. Based on the result of synthesis of hydrolysis products, the abs. configuration of UK-2 was identified.
IT **167173-85-5**, Antibiotic UK 2A
RL: PRP (Properties)
(structures of UK-1 and UK-2, novel antibiotics from Streptomyces sp. 517-02)
RN 167173-85-5

=> file caold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	42.25	175.96

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-5.88	-5.88

FILE 'CAOLD' ENTERED AT 11:50:40 ON 09 NOV 2001

FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE

display formats.

This file supports REGlstRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

```
=> d his


     (FILE 'HOME' ENTERED AT 11:46:22 ON 09 NOV 2001)

     FILE 'REGISTRY' ENTERED AT 11:46:25 ON 09 NOV 2001
L1              STRUCTURE UPLOADED
L2           14 S L1
L3          231 S L1 FULL

     FILE 'HCAPLUS' ENTERED AT 11:47:11 ON 09 NOV 2001
L4           17 S L3
L5           10 S L4 AND PD < MARCH 1998
L6            1 S L5 AND SAKANAKA, O?/AU
L7            9 S L5 NOT L6
L8            0 S L7, IBIB ABS FHITSTR, 1-9

     FILE 'CAOLD' ENTERED AT 11:50:40 ON 09 NOV 2001

=> s l3

L9            0 L3

=>

---Logging off of STN---


=>
Executing the logoff script...


=> LOG Y
```